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# A New Business Incentives Database

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# A New Business Incentives Database

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**Based on: "A New Panel Database on Business Incentives for Economic Development Offered by State and Local Governments in the United States"**

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# What is “new” about this new incentives database?

- More industry detail (45 industries, over 90% of wages)
- More years (26 years, 1990-2015)
- 33 states (over 90% of US output)
- Detail on 5 incentive types: job creation tax credits, property tax abatements, investment tax credits, R&D credits, customized training
- Detail on incentive time pattern: how varies from Year One to Year 20 for new facility
- Free, open-access database

# Database helps address these questions

- Is magnitude of incentives enough to significantly affect business location decisions?
- Do high-unemployment states offer more incentives?
- Do states target high-wage industries?
- Do states emphasize more “efficient” incentives?
  - e.g., frontloaded incentives, customized services
- How much do incentives matter for growth?
- For evaluation of an individual state, database provides useful context, and model for what questions to ask and what methodological tools to use.

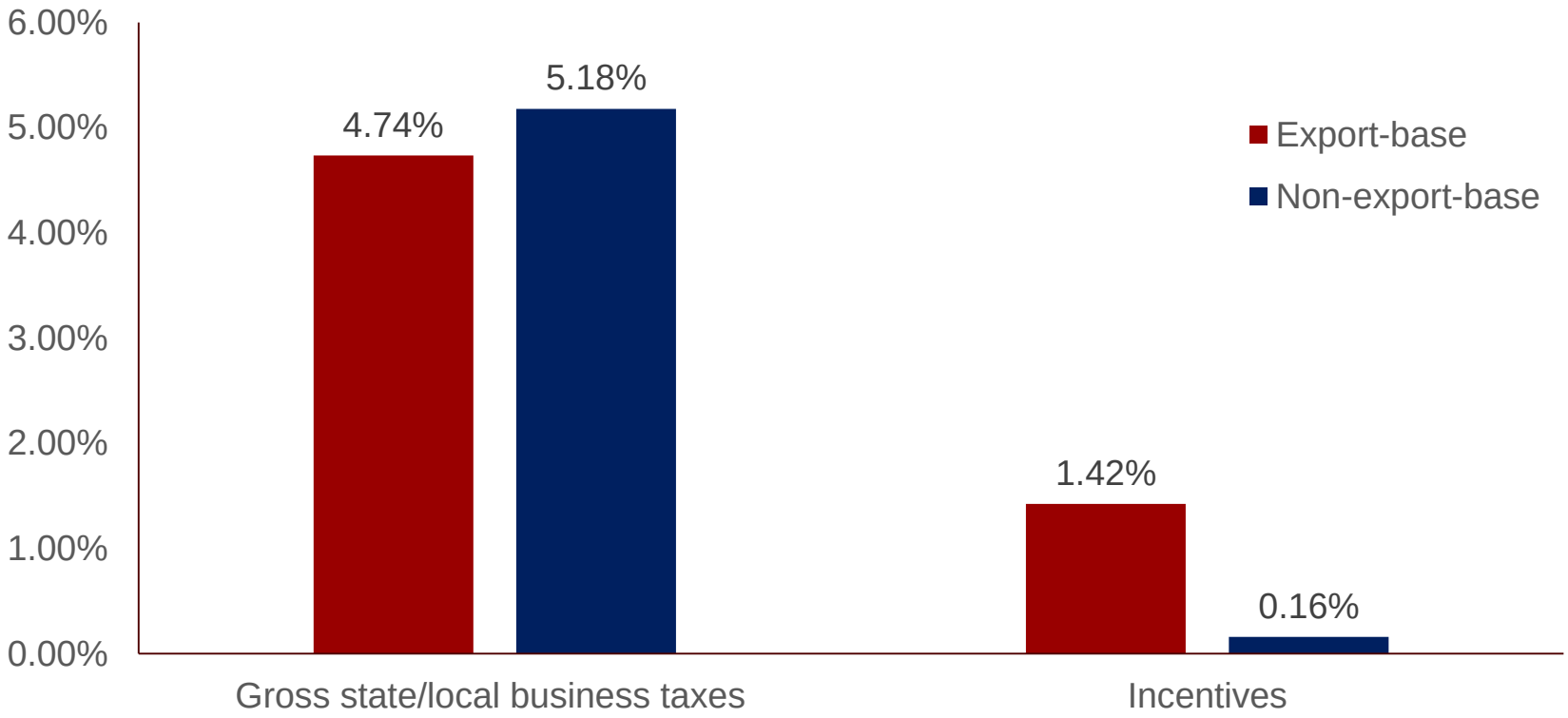
# Methodology of database

- Hypothetical firm model
- Assumes new facility that opens up in base year, stays at same scale for 20 years. Taxes & incentives of base year projected forward
- Tax & incentive calculations based on BEA/IRS data on how mix of jobs, real property, machinery/equipment, R&D, and wage rates vary by industry.
- Taxes included are property taxes, sales tax on business inputs, and corporate income tax.
- Incentives included are job creation tax credits, property tax abatements, investment tax credits, R&D credits, and customized job training.
- Incentives only included if they are part of “usual deal.”

# Database's outputs

- Taxes and incentives of each type for each of 20 years of facility operation, for 45 industries, 33 states, and 26 starting years.
- Taxes/incentives calculated as % of "value-added" = measure of firm's production = value of firm's sales minus its inputs from other businesses.
- Also calculate weighted average for 31 "export-base" industries: industries that sell goods/services outside state, bringing new $ into state.
- Report/database focus on "present value" of taxes/incentives as % of present value of value-added over those 20 years.
- Present value is calculated using very high 12% real discount rate. Why? Research evidence that this is discount rate corporate executives use in evaluating investment decisions.
- Implications of 12%: future heavily discounted. $ in year 10 worth only $0.36 in Year One.

# 2015 National Average for Incentives: 1.42% of value-added for export-base industries




NOTE: 2015 U.S. average, as percentage of value-added. Figures are for state/local business taxes, and state/local incentives.
SOURCE: Bartik (2017).

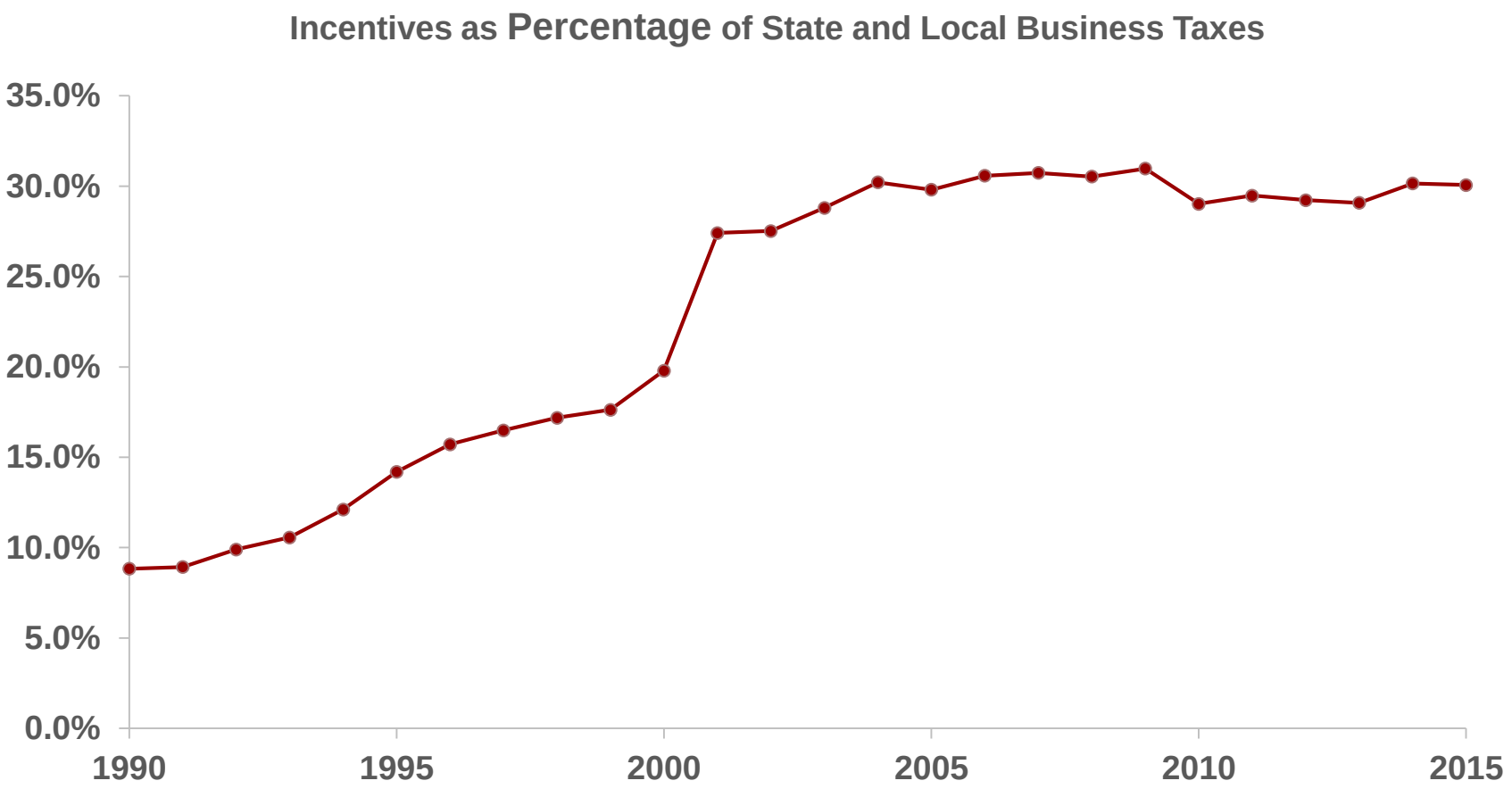
# Is 1.42% of value-added large?

- Large? 5.83% of business profits, 30.1% of state/local business taxes, annual national cost of $45 billion
- Small? 0.63% of sales, 3.07% of regular wages, $2,326 per worker "job-year"
- Based on literature on how taxes affect location decisions, reduced costs of 1% of value-added increases location decisions by 3 to 17 times as much
- Therefore, 1.42% cost reduction as % of value-added should tip between 4% and 24% of location decisions.

# Incentives vary a lot across states, even nearby states

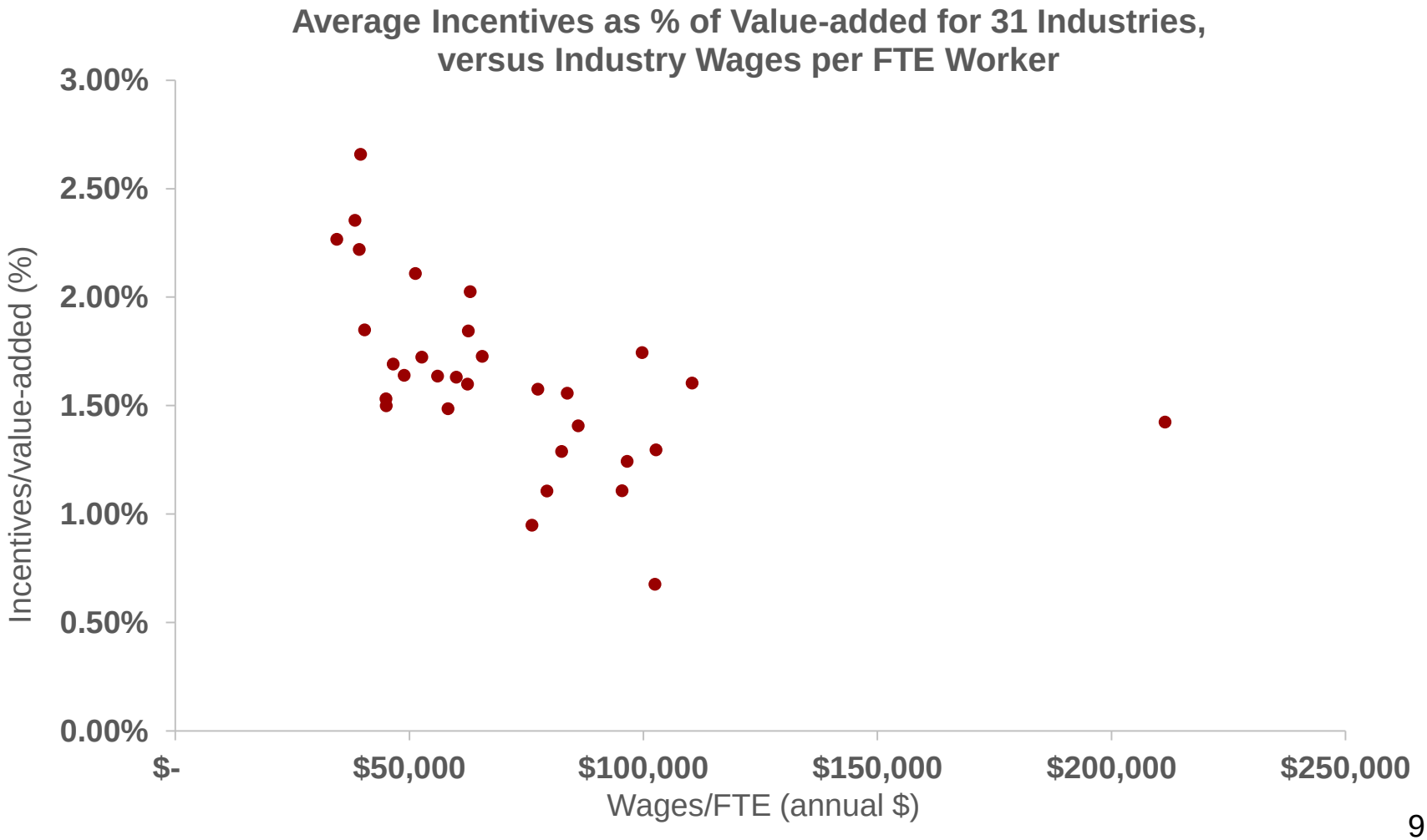
- New Mexico: 4.23% of value-added; Arizona: 1.06%
- New York: 3.53%; Connecticut: 0.65%
- Louisiana: 3.33%; Texas: 1.24%
- Indiana: 2.68%; Illinois: 1.35%
- S. Carolina: 2.39%; N. Carolina: 0.93%
- Wisconsin: 1.52%; Minnesota: 1.14%
- Oregon: 0.70%; Washington: 0.09%

# Incentives have tripled since 1990

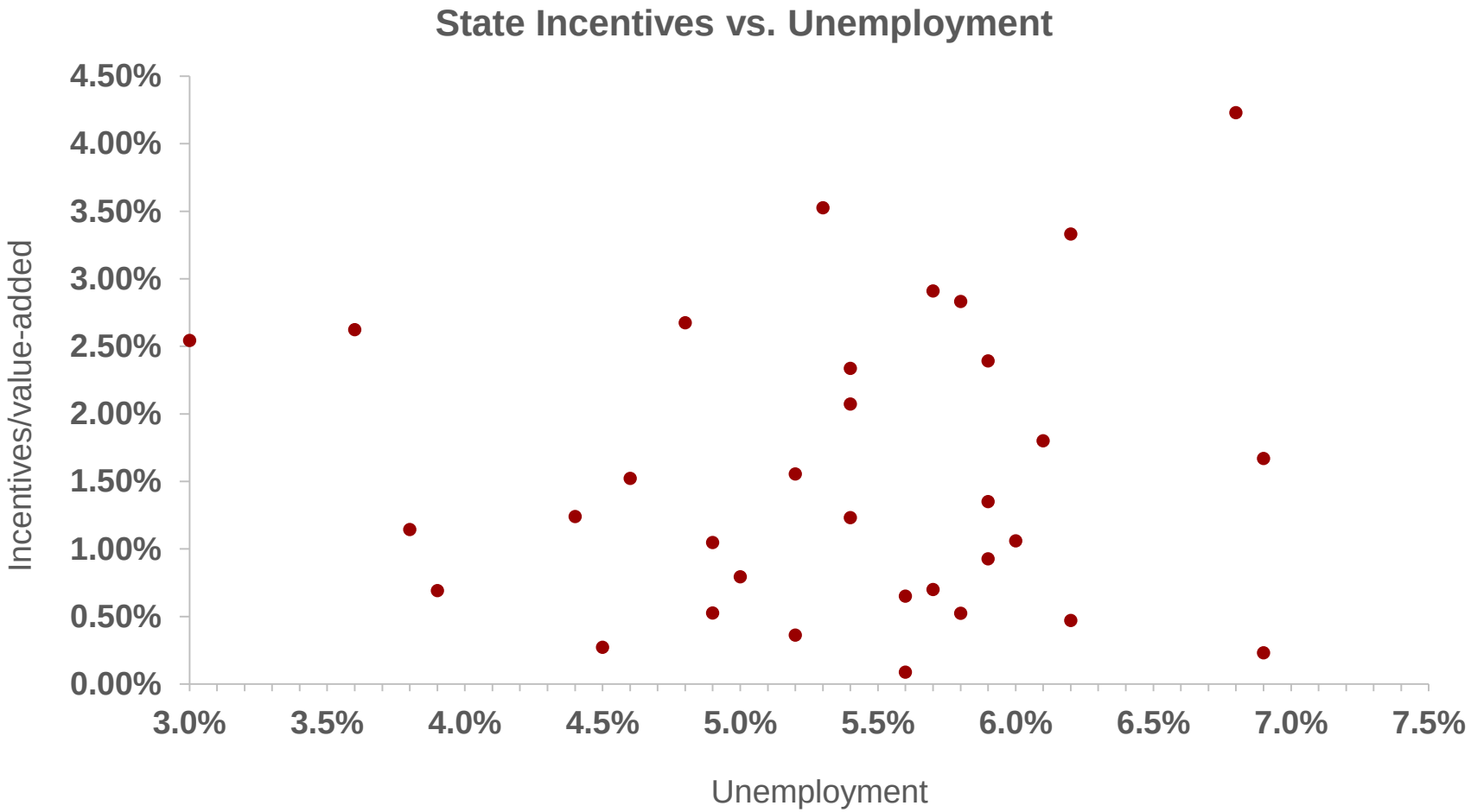



SOURCE: Author's calculations.

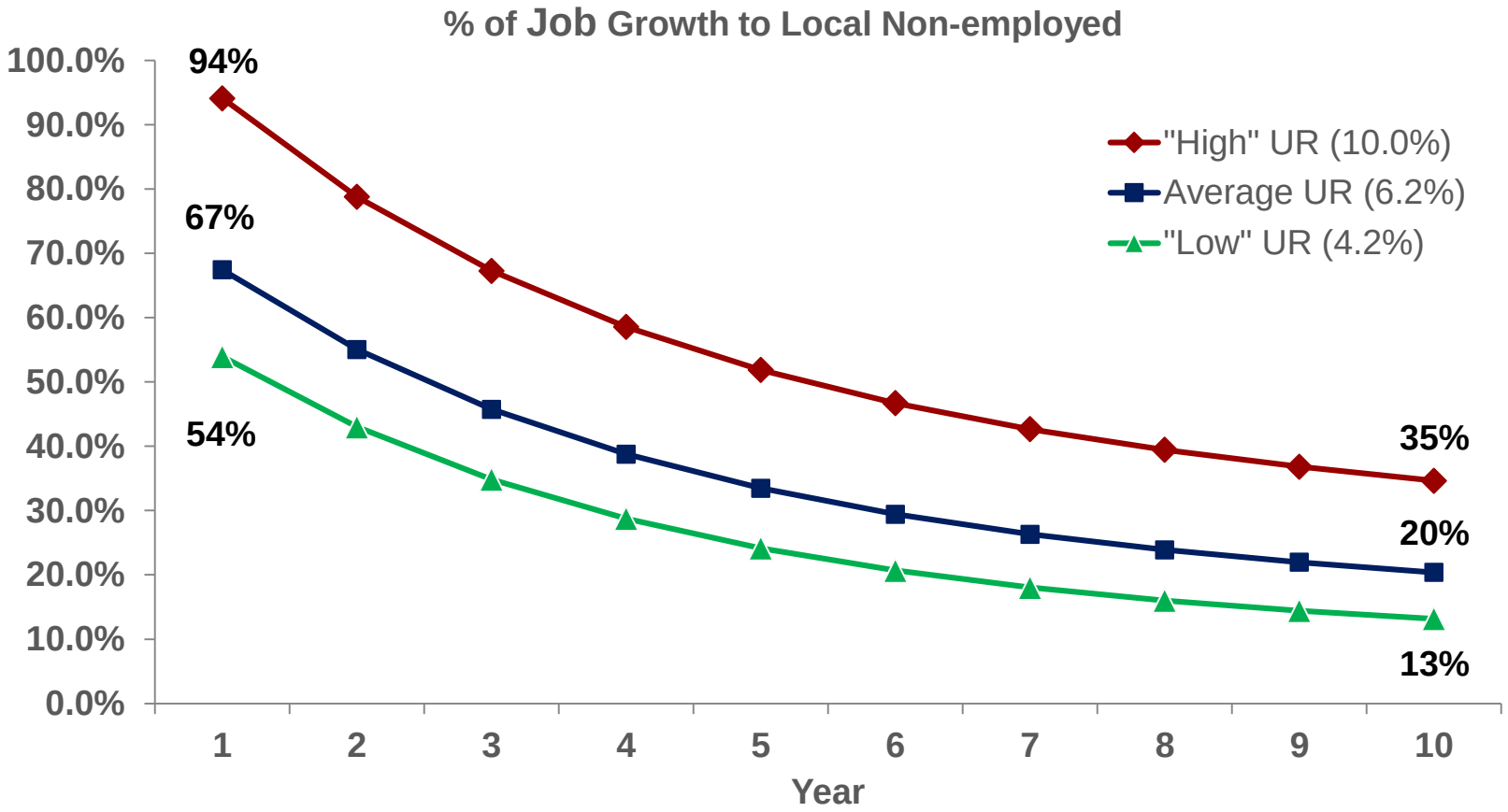
# Incentives don't vary enough with industry characteristics that predict how much new industry will benefit state residents. For example, not much variation with wages:



# What determines incentives? Doesn't have much to do with a state's unemployment rate

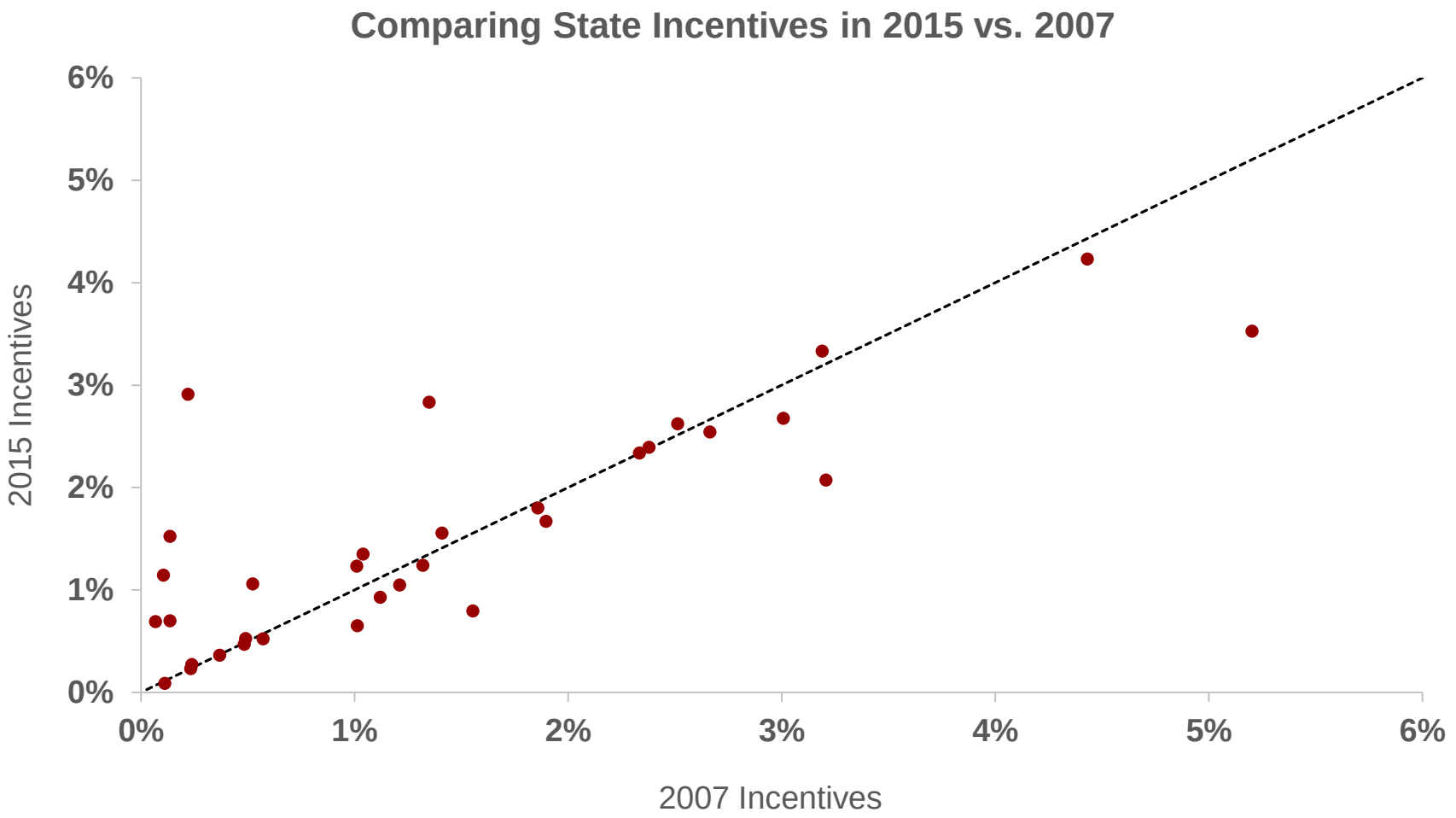


# Job growth increases employment to population ratios more when unemployment is high: This increases labor market and fiscal benefits of new jobs.

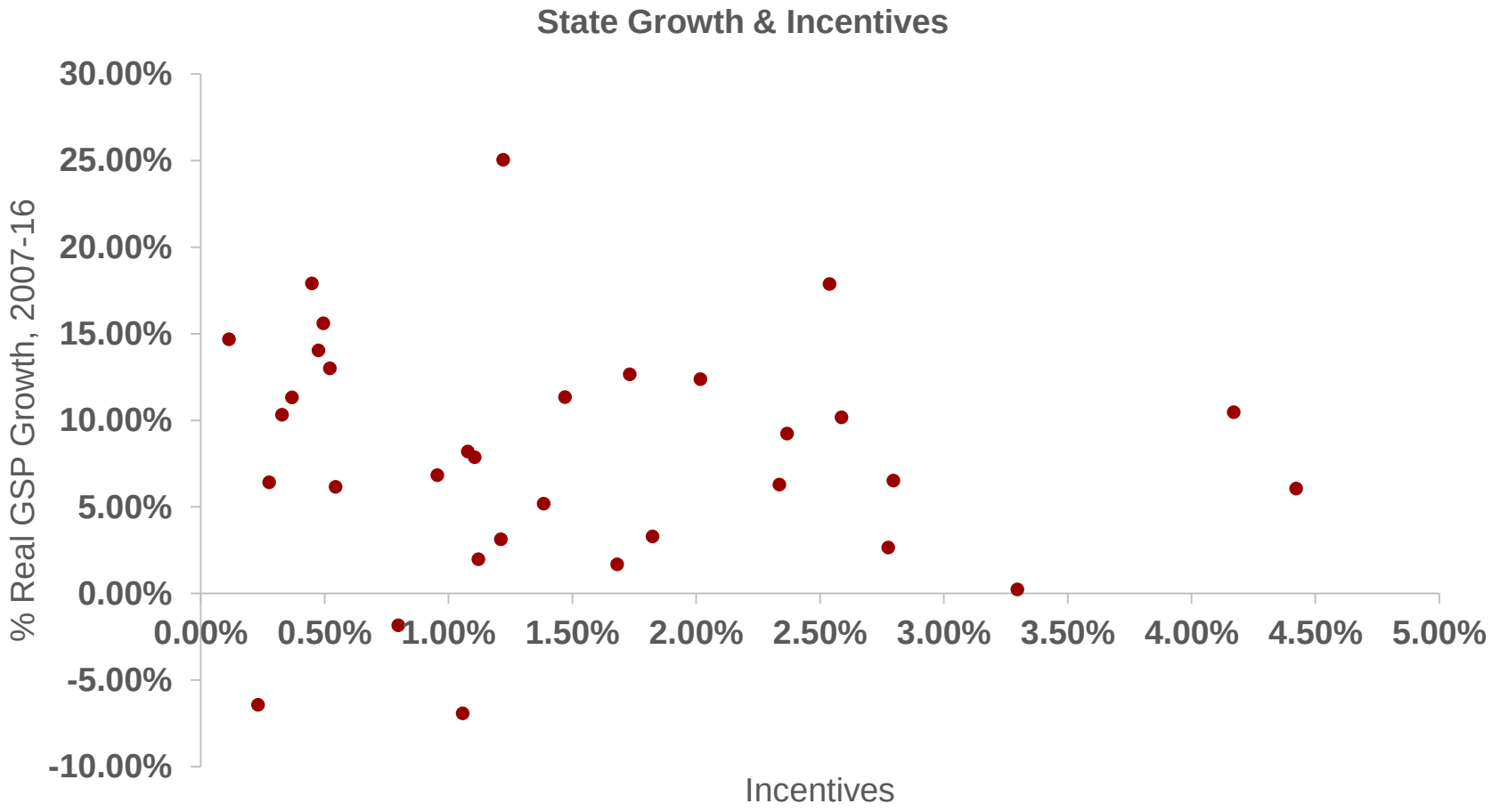



SOURCE: Bartik, T. (2015). *Growth and Change*.

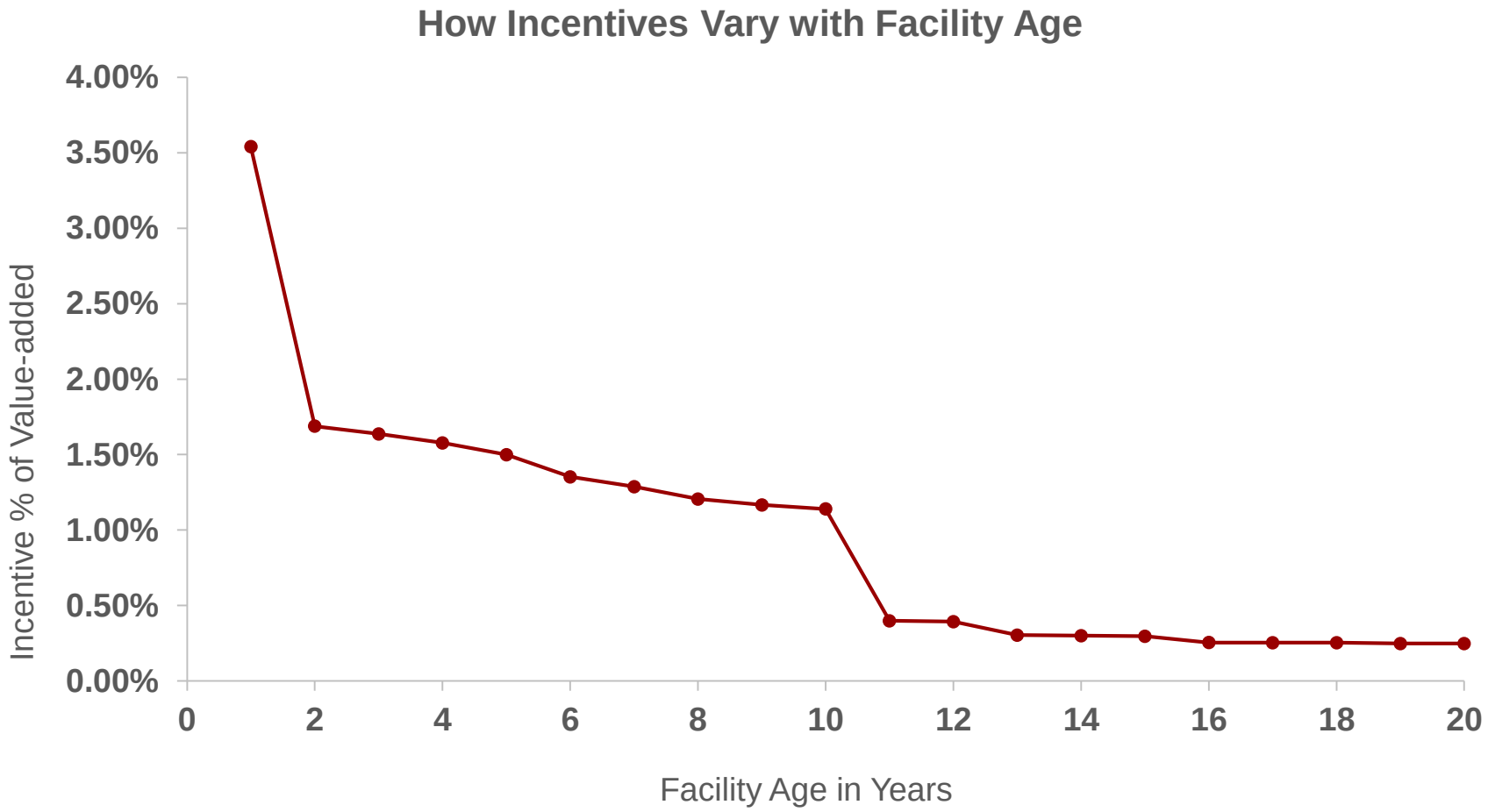
# Biggest determinant of a state's incentives is its past incentives



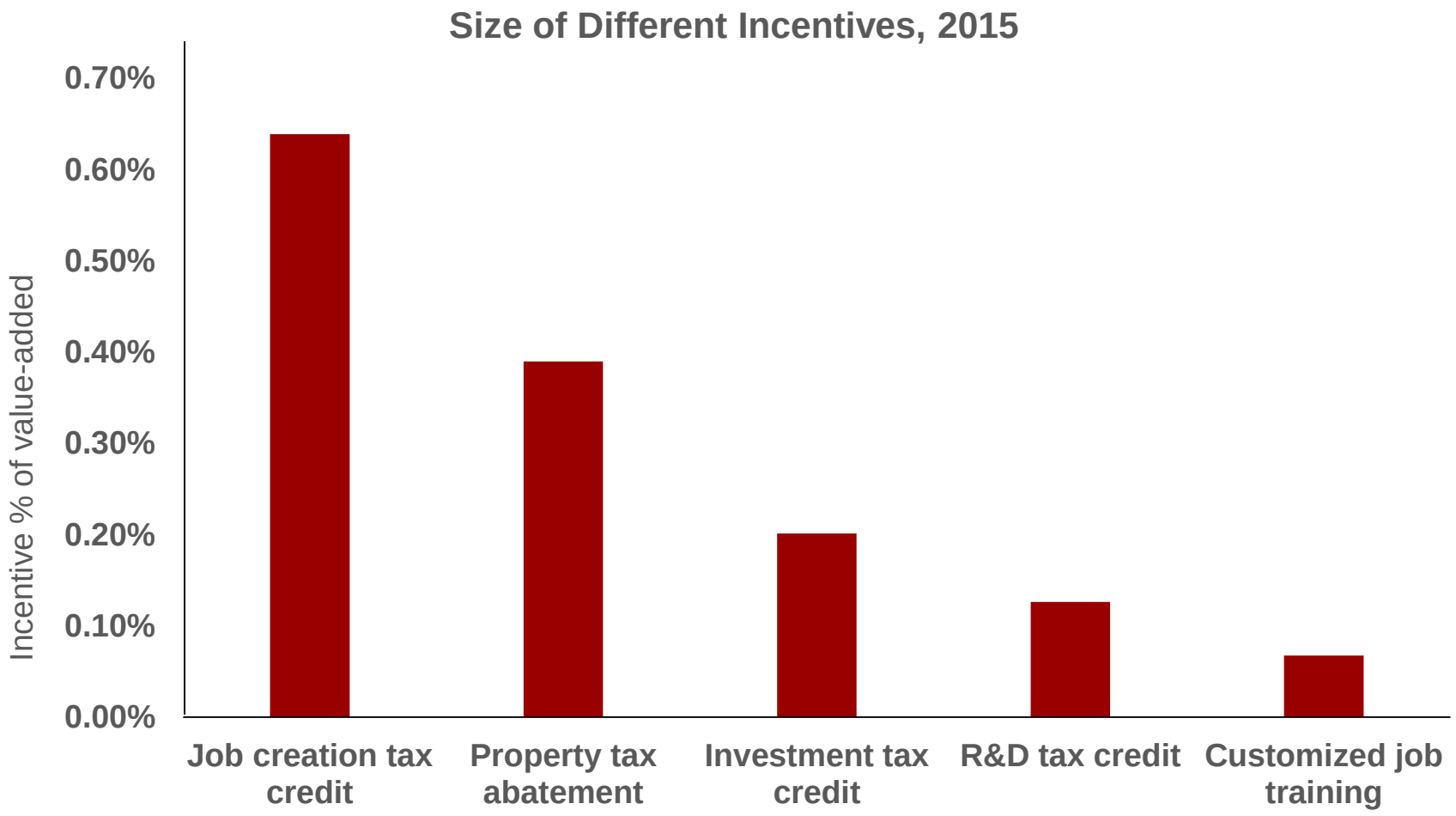
# What are effects of incentives? No obvious strong effects of incentives on state growth



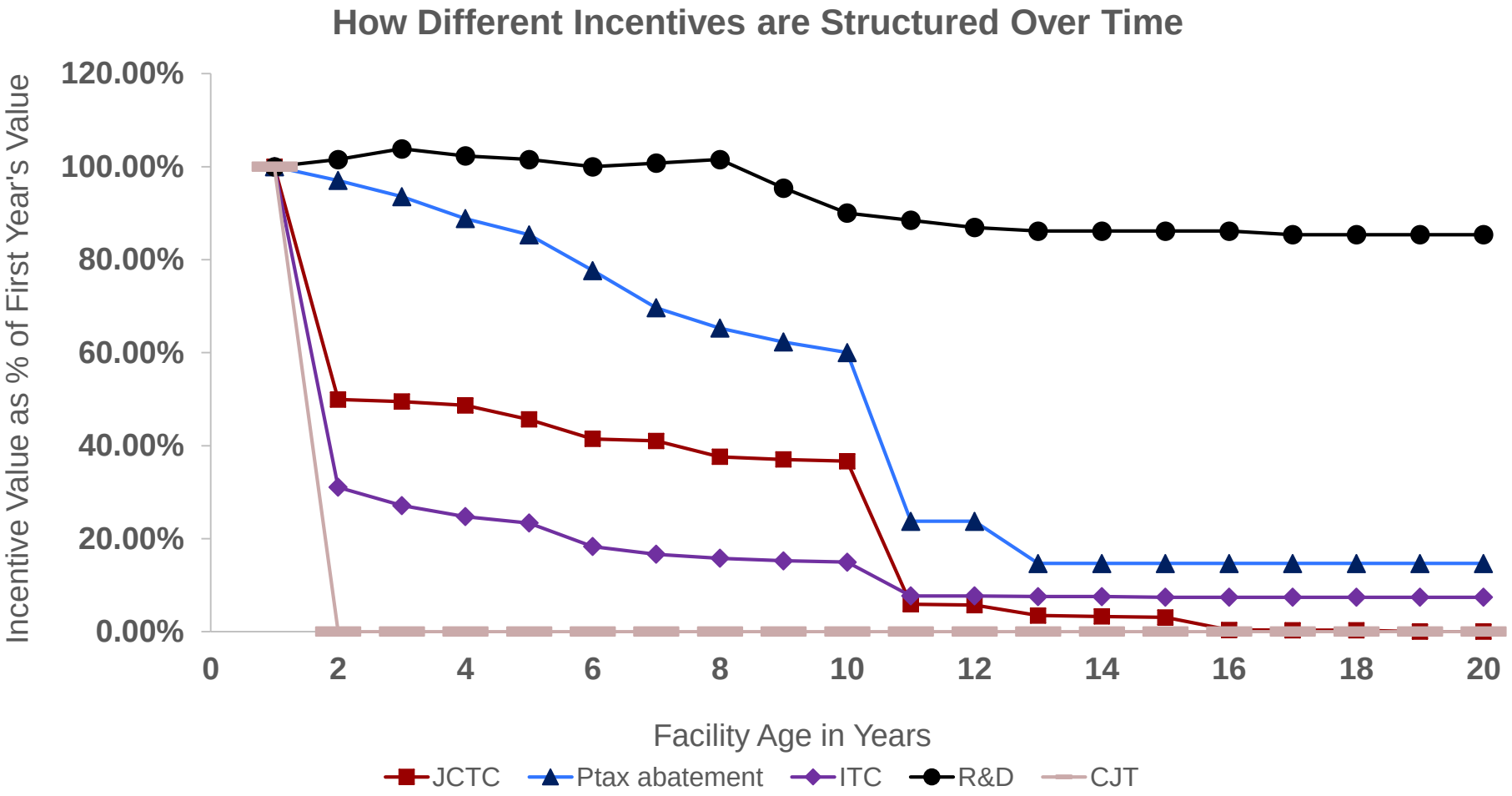
# What is time pattern of incentives? Front-loaded, but full incentive payout still delayed, which is economically inefficient and politically problematic



# What types of incentives are most important? JCTCs & abatements



# Time structure of different incentives: JCTCs, abatements, & R&D have lengthy payouts; ITCs & customized training more front-loaded



# Research on customized services

- Some research on customized job training find effects per dollar on job creation decisions of perhaps 10 times tax incentives: Hollenbeck (2008), Holzer et al. (1993), and Hoyt, Jepsen, and Troske (2008).

- Some research on manufacturing extension services find similarly high cost-effectiveness ratios: Jarmin (1998; 1999), Ehlen (2001).

- Why? (1) Targeted at small/medium-sized businesses, which are easier to affect; (2) Upfront, so more salient; (3) Overcoming market failures in information & education markets, so can have value greater than cost.

- Why don't states use more? (1) Harder to deliver; (2) Less politically visible; (3) Doesn't help larger businesses as much.

# Conclusions

- Incentives are large relative to state budgets, not necessarily large relative to private economy. But probably some incentives large enough to have significant effect on specific location decisions.
- Vary a lot across states (based more on political inertia than economic need?)
- Don’t vary enough across industries (the “reverse potato chip” rule?)
- Too long-term, not front-loaded enough
- Over-emphasis on tax incentives, under-emphasis on services to smaller businesses